



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,145	07/22/2003	Stephen W. Boyd	FXH1006USC1	8267

9561 7590 08/03/2010
POPOVICH, WILES & O'CONNELL, PA
8519 EAGLE POINT BLVD
Suite 180
LAKE ELMO, MN 55042

EXAMINER

NGUYEN, VI X

ART UNIT	PAPER NUMBER
----------	--------------

3731

MAIL DATE	DELIVERY MODE
-----------	---------------

08/03/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/625,145	Applicant(s) BOYD, STEPHEN W.	
	Examiner VICTOR X. NGUYEN	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16, 28-35, 63 and 64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16, 28-35, 63 and 64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3731

DETAILED ACTION

1. This Office Action is in response to the communication filed on 3/24/10. Upon further consideration, a new ground of rejection is made below.

Accordingly, claims 16, 28-35, 63-64 are pending in this present application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 16 is rejected under 35 U.S.C. 102(e) as being anticipated by Passafaro et al US 6,156,046.

Claim 16: Passafaro et al disclose a cage (a stent S, as best seen in figures 10I-M) which is movable from a collapsed position to an expanded position, the cage having a plurality of openings (see figures 10I-K) in the expanded position, the openings being formed by rigidly connected elements (the stent struts would be rigid to prevent it from collapse when the stent is in the expanded configuration) , the cage being configured such that when the cage is in the expanded position at the vascular site material from the vessel wall extends from the vessel wall into the openings, the cage S having an inner surface which defines a cavity, the cage being releasable so that the cage may be left within the patient; and a material removing element 54 positioned within the cage cavity to remove the material from the vessel wall extending into the openings when the cage is in the expanded position, the material removing element being 54

Art Unit: 3731

positioned beneath the cage as best seen in figures 10I-J and being configured to be movable along the inner surface of the cage to remove the material extending into the openings (see col. 20, line 3-col. 22, line 65).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 63-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Passafaro et al in view of Reger et al US 5,211,651.

Claims 63-64: Passafaro et al disclose the invention substantially as claimed (see claim 16 above). Passafaro fails to disclose a bag that is coupled to a material removing element. However, Reger et al teach a bag 262 that is coupled to a material removing element 266 (figures 27-28). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Passafaro with a bag that is coupled to a material removing element as taught by Reger in order to capture debris or matter from the bag or the filter.

Claims 28-30, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Passafaro et al in view of Klein et al US 5,776,141.

Claim 28-29: Passafaro et al disclose a cage (a stent S, as best seen in figures 10I-M) which is movable from a collapsed position to an expanded position, the cage having a plurality

Art Unit: 3731

of openings (see figures 10I-K) in the expanded position, the openings being formed by rigidly connected elements (the stent struts would be rigid to prevent it from collapse when the stent is in the expanded configuration) , the cage being configured such that when the cage is in the expanded position at the vascular site material from the vessel wall extends from the vessel wall into the openings, the cage S having an inner surface which defines a cavity, the cage being releasable so that the cage may be left within the patient; and a material removing element 54 positioned within the cage cavity to remove the material from the vessel wall extending into the openings when the cage is in the expanded position, the material removing element being 54 positioned beneath the cage as best seen in figures 10I-J and being configured to be movable along the inner surface of the cage to remove the material extending into the openings (see col. 20, line 3-col. 22, line 65). Passafaro fails to disclose an expandable cage being contained within a sheath and the sheath is retractable relative to the cage to expose or expand the cage. However, Klein et al teach an expandable cage S being contained within a sheath 70 and the sheath 70 is retractable relative to the cage to expose or expand the cage as best seen in fig. 10. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Passafaro with an expandable cage being contained within a sheath and the sheath is retractable relative to the cage to expose or expand the cage in order to deliver a proper stent to intraluminal target sites. As to claims 30, 33, Passafaro et al disclose the rigidly connected elements are deformed within an elastic range when moving from the expanded position to the collapsed position and the cage can form between 2-10 openings as best seen in figures 10I-M.

Art Unit: 3731

As to claims 34-35: Passafaro in view of Klein discloses the invention substantially as claimed. However, they are silent regarding the openings of the cage have a length of at least 1 mm and the openings of the cage have a size of at least 0.5 mm. Regarding claims 34-35, the device could make the openings of the cage have a length of at least 1 mm and the openings of the cage have a size of at least 0.5 mm as best seen in fig. 1. In the alternative, it has been held that changes in size only require routine skill in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the device with the openings of the cage have a length of at least 1 mm and the openings of the cage have a size of at least 0.5 mm and a minor modification of Passafaro's device would adopt the same for use under various conditions of service, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re. Aller, 220F, 2d 454, 105 USPQ 233.

Claims 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Passafaro et al in view of Klein et al as applied to claim 28 above, and further in view of Reger et al US 5,211,651.

Claims 31-32: Passafaro in view of Klein discloses the invention substantially as claimed. However, they are silent regarding a bag that is coupled to a material removing element. However, Reger et al teach a bag 262 that is coupled to a material removing element 266 (figures 27-28). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Passafaro in view of Klein with a bag that is coupled to a material removing element as taught by Reger in order to capture debris or matter from the bag or the filter.

Response to Arguments

4. Applicant's arguments, filed 3/24/2010, with respect to claims 16, 28 have been fully considered and are persuasive. Therefore, that final rejection has been withdrawn. However, upon further consideration, a rejection of claims 16, 28-35, 63-64 is made in view of Passafaro, Klein and Reger can still be sustained. Applicant is asked to please refer to the modified prior art rejections above where examiner address applicant's concerns regarding prior art rejection.

Conclusion

5. Applicant's amendment (4/7/2009) necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VICTOR X. NGUYEN whose telephone number is (571)272-4699. The examiner can normally be reached on M-F (8-4.30 P.M).

Art Unit: 3731

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VN/

Examiner, Art Unit 3731

7/23/2010

/Gary Jackson/

Supervisory Patent Examiner

Art Unit 31/34/73

August 1, 2010